



July 11, 2000  
Project No. 97664V3

Ms. Brenda Pohlmann  
Nevada Division of Environmental Protection  
555 E. Washington, Suite 4300  
Las Vegas, NV 89101-1049

**RE:** *Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road bridge.*

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on June 28, 2000 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 410 micrograms per Liter ( $\mu\text{g/L}$ ). The NEL report is included with this letter, along with the Perchlorate Summary Table for 2000.

In addition to the sample we collected and submitted to NEL, a split sample was collected per the request of Mr. Kevin Mayer, with the US Environmental Protection Agency (USEPA). This split sample was collected at the same time and in the same manner as the sample submitted to NEL, and was sent, under chain-of-custody protocol, to the USEPA Laboratory in Richmond, California.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,  
Geotechnical & Environmental Services, Inc.

Daniel C. Burns, C.E.M.\*  
#1692 (Expires 10/07/2001)  
Project Manager

Gregory P. DeSart, P.E., C.E.M.  
#1172 (Expires 12/22/2000)  
President

\* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

d/r  
Enc: 2000 Perchlorate Summary Table  
NEL Analytical Report

Dist: 1 faxed to addressee at 486-2863  
1 original mailed to addressee  
cc: fax to Jeff Gibson, American Pacific Corporation  
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105  
cc: to project file 97664V3

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117  
(702) 365-1001 • Fax (702) 341-7120  
[www.gesnevada.com](http://www.gesnevada.com)

**Las Vegas Wash at Northshore Road Bridge  
2000 Summary of Perchlorate Concentrations**

| <b>Date Sampled</b> | <b>Perchlorate (µg/L)</b> |
|---------------------|---------------------------|
| 1/27/00             | 569                       |
| 2/28/00             | 720                       |
| 3/29/00             | 870                       |
| 4/27/00             | 750                       |
| 5/30/00             | 740                       |
| 6/28/00             | 410                       |

# NEL LABORATORIES

Reno • Las Vegas  
Phoenix • So. California

Las Vegas Division  
4208 Arcata Way, Suite A • Las Vegas, NV 89030  
(702) 657-1010 • Fax: (702) 657-1577  
1-888-388-3282

CLIENT: Geotechnical & Env. Serv.  
7560 West Sahara Ave. #101  
Las Vegas, NV 89117  
ATTN: Dan Burns

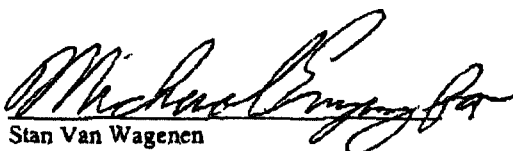
PROJECT NAME: FPF  
PROJECT NUMBER: 97664 V3

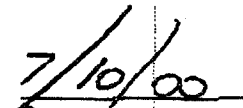
NEL ORDER ID: L0006328

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 6/28/00.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

  
Stan Van Wagenen  
Laboratory Manager

  
Date

## CERTIFICATIONS:

|                               | Reno      | Las Vegas | S. California |
|-------------------------------|-----------|-----------|---------------|
| Arizona                       | AZ0520    | AZ0518    | AZ0605        |
| California                    | 1707      | 2002      | 2264          |
| US Army Corps<br>of Engineers | Certified | Certified |               |

|            | Reno      | Las Vegas | S. California |
|------------|-----------|-----------|---------------|
| Idaho      | Certified | Certified |               |
| Montana    | Certified | Certified |               |
| Nevada     | NV033     | NV052     | CA084         |
| L.A.C.S.D. |           |           | 10228         |

# NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.  
PROJECT ID: FPF  
PROJECT #: 97664 V3

CLIENT ID: North Shore Road Bridge  
DATE SAMPLED: 6/28/00  
NEL SAMPLE ID: L0006328-01

TEST: Inorganic Non-Metals  
MATRIX: Aqueous

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>D. F.</u> | <u>METHOD</u> | <u>UNITS</u> | <u>ANALYZED</u> |
|------------------|---------------|----------------------------|--------------|---------------|--------------|-----------------|
| Perchlorate      | 410           | 40.                        | 10           | EPA 314       | µg/L         | 7/3/00          |

D.F. - Dilution Factor

ND - Not Detected

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# NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.  
PROJECT ID: FPF  
PROJECT #: 97664 V3  
TEST: Non-Metals

CLIENT ID: Method Blank  
DATE SAMPLED: NA  
NEL SAMPLE ID: 000703CLO4AQ-BLK

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING<br/>LIMIT</u> | <u>D. F.</u> | <u>METHOD</u> | <u>UNITS</u> | <u>ANALYZED</u> |
|------------------|---------------|----------------------------|--------------|---------------|--------------|-----------------|
| Perchlorate      | ND            | 4                          | 1            | EPA 314       | µg/L         | 7/3/00          |

D.F. - Dilution Factor

ND - Not Detected

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**Reno • Las Vegas  
Phoenix • So. California**

GES D. Burns

Address: 7560 W. Sahara Ave, #101

Las Vegas NV 89117

Phone Number: 702 365-1001  
Fax Number: 702 341-7229  
Billing Address:  
Expected Date: 5/1

Requested Turnaround: X 5-day      2-day      1-day      Other     

| Time/Date<br>Sampled | Customer Sample Identification | N.E.L.<br>Identification |
|----------------------|--------------------------------|--------------------------|
|----------------------|--------------------------------|--------------------------|

|                |                         |
|----------------|-------------------------|
| 1300/156-28-00 | North Shore Road Bridge |
|----------------|-------------------------|

Custody Seal intact? Y N None Temp. 23C

Condition when received

Requisitioned by (Print) \_\_\_\_\_ (Signature) \_\_\_\_\_

|               |          |      |
|---------------|----------|------|
| Richard Cooke | 06/26/00 | 1512 |
| Riordan Cooke |          |      |

|   |        |          |                |
|---|--------|----------|----------------|
| 2 | Police | 12/20/20 | 11-25-20 10:57 |
| 3 |        |          |                |

|                        |     |
|------------------------|-----|
| Project Name:          | EPI |
| Purchase Order Number: |     |

729

|                |         |
|----------------|---------|
| Project Number | 97664V3 |
| Sampled By     | 1001    |

✓ - make

## CHAIN OF CUSTODY

NEL Work Order: 20006828

## Analysis

Dechlorate

Remarks

|                     |              |
|---------------------|--------------|
| DW - Drinking Water | SD - Solids  |
| WW - Wastewater     | AQ - Aqueous |
| OL - Organic Liquid | A - Air      |

A.  $\text{HCl}$   
B.  $\text{HNO}_3$   
C.  $\text{H}_2\text{SO}_4$   
D.  $\text{NaOH}$

E. Ice Only  
F. Other  
G. Not Preserved

The facility of NEL Laboratories Inc. is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, shipping costs and/or qualified data related to samples not received in good condition including adequate sample volume and number of containers. Customer signature of this CoC constitutes a purchase order for NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard Unit Prices for all services ordered here on, except those specified otherwise via an NEL Quotation for Testing Services. NEL turnaround times are measured in regular working days. Samples received at the lab after 16:30 will be confirmed received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.